

ISRB Recommendation	Response	Priority	Completion Date
<b>A. Incident Command</b>			
<b>A.1.1</b> HCDFRS General Order 300.07 and General Order 310.01 should be amended to clearly establish the first arriving unit officer as Incident Commander, eliminating the circumstances when Command may be passed. Instead, the unit officer may transition to a Command level staff once the Command officer reaches the incident scene.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>A.2.1</b> The Initial Radio Report protocol should be amended, removing the requirement that the Incident Commander declare an offensive or defensive strategy.	IC declaration of offensive or defensive strategy will not be amended and will be addressed in Revised General Order 300.07 Incident Command System and Revised General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>A.3.1</b> The Incident Commander should complete their own 360-degree assessment of the incident to establish their mental model.	HCDFRS released SO 2019.24 Operational Update. “IC’s shall either conduct or delegate the accomplishment of a 360-degree assessment of the structure, utilizing a thermal imager if available.”	1	April 5, 2019
<b>B. Strategy and Tactics</b>			
<b>B.1.1</b> HCDFRS must clarify its philosophy of Incident Command, with a recommendation for adopting a mission-based expression of strategy where lower-level officers (unit officers) are empowered to make tactical decisions to carry out the overall incident strategy. This philosophy of Command should then be reflected in all General Orders and supported by training.	HCDFRS General Order 300.07 Incident Command System. The Office of the Fire Chief understands that the Tactical Command Mode of the Policy reflects this Report Recommendation. “An IC functioning in the Tactical Command Mode is typically a company officer that is performing all the responsibilities of Command while on-foot and from within the tactical environment.” However, the Operations Policy Committee are examining the inclusion of the “Fast Attack Mode” (IC direct involvement with fire attack will make a positive difference) to the appropriate Revised General Orders which would address this recommendation.	1	

ISRB Recommendation	Response	Priority	Completion Date
<b>B.1.2</b> General Order 310.01 Single Family Townhome and Structure Fire Operational Guidelines must be revised to more clearly articulate strategy employed on the fireground, modernizing the current binary “offensive”/” defensive” strategy.	<p>This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.</p> <ul style="list-style-type: none"> <li>Resource Deployment Models for procedural assignments and the newly developed tactical manuals for various types of structures to guide company officers with tactical decisions.</li> </ul>	1	Projected Revised Order Release Fall 2021
<b>B.3.1</b> The Incident Commander should complete a 360-degree survey and situational assessment of the fireground before declaring a strategy.	HCDFRS released SO 2019.24 Operational Update. “IC’s shall either conduct or delegate the accomplishment of a 360-degree assessment of the structure, utilizing a thermal imager if available.”	1	April 5, 2019
<b>B.4.1</b> HCDFRS must implement hands on competency-based training in realistic conditions that reinforces fundamental skills and teamwork necessary for success on the fireground.	<p>The Department has implemented the recent and ongoing training listed below for hands on competency-based training in realistic conditions reinforcing fundamental skills and teamwork for fireground success.</p> <ul style="list-style-type: none"> <li>SO 2018.20 Modern Fire Dynamics Training Integration</li> <li>SO 2018.53 IAFF Fireground Survival Training</li> <li>SO 2019.15 2019 American City Building High-Rise Training Live Burns</li> <li>SO 2019.63 2019 Fall Quarterly Officer Training</li> <li>SO 2019.85 Tactical High-Risk Operation Academy Rotations</li> <li>SO 2020.13 Spring Quarterly Officer Training</li> <li>SO 2021.21 Tactical High-Risk Operation Academy Rotations</li> </ul>	1	
<b>B.7.1</b>	Field Operations Commanders conduct Lessons Learned reports for significant incidents available for all to review on Virtual	1	

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HCDFRS leadership must hold crews accountable for failing to execute actions dictated by the General Order without informing the Incident Commander.	Academy. This report gives a brief incident description with accountable facts that are used as learning points for improved performance.		
<b>B.7.2</b> HCDFRS must integrate reporting of location into existing CAN reports (LCAN).	This recommendation will be addressed in Revised GO 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee has integrated location into existing CAN reports (LCAN) to be implemented in the revised policy.	1	Projected Revised Order Release Fall 2021
<b>B.9.1</b> HCDFRS must modify this policy of what qualifies as a metro box or rural box based on clear distance from a water source to the incident site.	<p>Data Analysis Manager Danielle Goodwin delivered a presentation to OFC, BOTS and ESB that researched residential addresses in questionable Box Areas utilizing an ArcGIS Web AppBuilder program that identified Residential Hydrant map highlights with the following:</p> <ul style="list-style-type: none"> <li>• Metro Box areas with residential addresses 600 or less feet away from a fire hydrant.</li> <li>• Rural Box areas with residential addresses over 800 feet away from a fire hydrant.</li> </ul> <p>The ISRB project manager is currently utilizing modified duty personnel to verify identified questionable addresses from the report to ensure proper Metro vs Rural identification to either redevelop box status or incorporate finding into the CAD system. On-going project.</p>	1	
<b>B.10.1</b> HCDFRS personnel must be trained to: Complete a rescue attempt from an upper-level floor. Continue suppression efforts while RIC operations are underway.	HCDFRS S0 2018.07 Quarterly Officer Training – RIC/MAYDAY Training. The Winter Quarterly Officer Training followed NFPA 1407 and NFPA 1561 and included an annual evaluation of the corresponding orders for Rapid Intervention Crews (RIC) and Mayday situations, their command functions and operational performance based on the requirements of these standards. It involved the participation of companies in a RIC/MAYDAY deployment scenario at the American Cities Building (ACB). This training was MANDATORY for all career acting Lieutenants, Lieutenants, Captains, Battalion Chiefs, and Assistant Chiefs. Attendance was on duty, strictly tracked and	1	February 2018

ISRB Recommendation	Response	Priority	Completion Date
	<p>included the assistance of all companies. The Operations Policy Review Committee reviewed GO 300.04 MAYDAY SITUATIONS and GO 300.11 Rapid Intervention and IDLH Initial Entry Teams for possible revisions, relevance, and updates.</p> <p>To maintain the highest level of training, the Department, in collaboration with the International Association of Firefighters (IAFF), delivered the Fire Ground Survival (FGS) program which is the most comprehensive survival skills and Mayday prevention program currently available within the fire service. It is a program curriculum developed using near misses, close calls, and firefighter fatalities to address the critical elements of fire ground survival. Information from NIST, NIOSH, IAFF, IAFC, UL/USFA/NFPA and the military was used to develop the curriculum. The curriculum is a 16-hour didactic and 16-hour practical program that included the following parts:</p> <ul style="list-style-type: none"> <li>• Preventing the Mayday</li> <li>• Being Ready for the Mayday</li> <li>• Self-Survival Procedures</li> <li>• Self-Survival Skills</li> <li>• Firefighter's expectations of Command</li> </ul>		
<p><b>B.10.2</b> Incident Commanders must be trained on managing RIC operations.</p>	<p>See response for Report Recommendation B.10.1 as one of the training objectives included intergrading the Incident Command System at the battalion and company level requiring firefighter rescue deployment (RIC) after a MAYDAY declaration during High-Rise operations.</p>	1	
<p><b>B.10.3</b> Crews should continue to use restraint in ventilating structures.</p>	<p>During all live Fire Training, Incident, and After Incident Report emphasis is placed on proper use of ventilation in structures.</p>	1	
<b>C. Communications</b>			
<p><b>C.5.1</b> All crew members would benefit greatly from additional training on appropriate and effective fireground communications.</p>	<p>Enabling Learning Objective (ELO) Demonstrates Closed Loop Communication of the THOAR training program placing emphasis on appropriate and effective fireground communications. Company Officers and their crew are evaluated on obtaining all necessary</p>		

ISRB Recommendation	Response	Priority	Completion Date
	information, communications equipment being operated correctly, and relaying information promptly, timely, accurately, clear, and complete.		
<p><b>C.9.1</b> Current configuration of the radio broadcast emergency identifier on the radio channel on which the radio is currently operating. To mitigate human error of a crew member operating on a channel that is unmonitored, an emergency identifier activation on Bravo, Charlie, and Delta talk groups should revert the member to a channel that is always monitored by the Communications Center and the Incident Commander.</p>	<p><b>Radio Committee Reprogramming Changes</b> When the Emergency Activation button is depressed, portable radio's switch to the following monitored channels.</p> <ol style="list-style-type: none"> <li>1. Alpha Zone and Golf Channels to A2.</li> <li>2. B, C and D Zones to Channel 1. <ul style="list-style-type: none"> <li>• Hot mic (open mic) for 10 seconds when depressing emergency button. Howard County channels only.</li> <li>• Reduced the "FF down" feature on the radio to activate after 45 seconds then alarm for 30 seconds afterwards activate emergency.</li> <li>• Switch out lapel mics to remove the channel selector from lapel mic. The new lapel mics will have the Emergency Button and volume control only.</li> <li>• Scan only available on A zone for the F4 template (FF radios).</li> <li>• Scan available on A, B, C, and D for the F5 template (HVO and OIC radios)</li> </ul> </li> </ol>	1	January 2019
<b>D. MAYDAY</b>			
<p><b>D.1.1</b> Prior to entering an IDLH environment, firefighters must verify that they are operating on the appropriate talk group.</p>	THOAR hands on competency-based training in realistic conditions places emphasis on the importance of proper radio transmissions through closed-loop communication. Incidents with IDLH environments will be assigned a talk group in an incident zone (i.e. Bravo 1, Charlie 1, Delta 1). Because incident zones can be dynamic, it is extremely important that company officers and firefighters assure they are operating on the appropriate talk group.	2	
<p><b>D.1.3</b> HCDFRS MUST REQUIRE Incident Commanders to confirm the operational channel with the individual calling the MAYDAY. The Incident Commander shall advise the individual to visually check their portable radio, if possible. Additionally, the Communications Center, or Incident Commander on Bravo 7 should instruct a</p>	This recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021

ISRB Recommendation	Response	Priority	Completion Date
firefighter experiencing a MAYDAY emergency to press their emergency identifier.			
<b>D.2.1</b> Personnel must have consistent training on how to clearly make a MAYDAY transmission for themselves or others. This training should be done while the individual is in a high-stress environment and tasked with this responsibility.	See response to Report Recommendation D.5.1	2	
<b>D.3.1</b> Incident Commanders and Officers must train on ways to unclear MAYDAY transmissions, providing reassurance to individuals as appropriate. This training should also include process for Incident Commanders to work with the Communications Center. This process includes having the Communication Center send the emergency tones and announcing that a MAYDAY has been declared. The Incident Commander shall notify all personnel operation on the incident Who is calling the MAYDAY, What the problem is, and where the emergency is located.	See response to Report Recommendation D.5.1	2	
<b>D.5.1</b> HCDFRS must conduct training on MAYDAY emergencies on a regular basis. This training should include review HCDFRS General Order 300.04 MAYDAY Situations and practical evaluations. Practical evaluations shall give personnel the opportunity to transmit and receive a MAYDAY emergency while operating under simulated emergency conditions.	HCDFRS initiated the Tactical High-Risk Operations Academy Rotations (THOAR) training program through the Emergency Service Bureau and the Education and Training Bureau. THOAR will use the crawl, walk, run methodology of training. This methodology means training under an expected operational environment for the mission. Units that generally respond together will rotate through each phase together. This rotation is paramount in developing the company and battalion cohesion. The job performance requirements and training enabling learning objectives are given for each scenario. Each quarter of the year will follow the same training scaffolding. <ul style="list-style-type: none"> <li>• First-month competency in the basics, tabletop scenarios, and simulations.</li> <li>• The second-month, Realistic Training Scenarios.</li> <li>• Third-month, Live Fire Acquired Structure Training, or an environment like the emergency, i.e., HAZMAT, Confined Space, Mass Casualty, and Active Assailant.</li> </ul>	1	January 2020

ISRB Recommendation	Response	Priority	Completion Date
	<p>Tactical High-risk Operational Academy Response (THOAR): Basement Fires</p> <p>Given information relating to a single-family basement fire, utilizing the department's fire- ground organization and operational procedures the students will be able to simulate the elements that relate to Incident Command, Mission Oriented Concepts, Closed Loop Communication, Crew Accountability, Strategy and Tactics, Mayday, and Rapid Intervention Crew</p>		
<b>E. Structure Evacuation</b>			
<b>E.1.2</b> HCDFRS must revise General Orders to separate evacuation from strategy changes for clarity.	This Recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>E.1.2</b> HCDFRS must revise General Orders to separate evacuation from strategy changes for clarity.	<p>SO 2020.53 Emergency Tone - the Department will be utilizing one tone to indicate emergency messaging. Instances when the Emergency Tone may be requested include, but are limited to:</p> <ol style="list-style-type: none"> <li>1. Changing operational strategies</li> <li>2. Mayday declaration</li> <li>3. The need to exit or abandon a structure</li> <li>4. Other communications deemed urgent by the IC or operating personnel</li> </ol>	1	July 2, 2020
<b>E.3.1</b> HCDFRS must examine the processes outlined in General Order 310.01 Single Family and Townhouse Structure Fire Operational Guidelines and General Order 410.01 Communications to determine if either process meets current operational needs, make any needed modifications, and then codify both process into one single process and rewrite each General Order with the same modified process. Additionally, the orders must be revised to: <ul style="list-style-type: none"> <li>• Align with the intent of NFPA 1561's language: "[A]t the conclusion of the MAYDAY or emergency traffic</li> </ul>	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System, General Order 310.01 Structure Fire Operational Guidelines and General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021



ISRB Recommendation	Response	Priority	Completion Date
<p>situation, the Incident Commander should then transmit all clear, resume radio traffic.”</p> <ul style="list-style-type: none"> <li>• Add the sounding of apparatus (air horns minimally) at the ordering of an abandon evacuation order.</li> <li>• Include PARs of all crews at an incident who are not in staging.</li> </ul>			
<p><b>E.3.2</b> HCDFRS personnel should be trained on all modified orders. The training should include a practical component that utilizes the audio warning(s) fire fighter will hear via Communications Center.</p>	<p>HCDFRS currently has a system thru the virtual academy to assure all personnel have complied with reading new or modified orders. The Operations Bureau along with the Bureau of Education and Training will work together to provide personnel with a phased in practical training component (THOAR) addressing all new/modified Operational orders to include all audio warning(s) from the Communications Center or PSAP.</p>	2	
<p><b>E.3.3</b> HCDFRS must standardize emergency evacuation procedures, practices, and alerts with surrounding jurisdictions so that neighboring jurisdictions and HCDFRS have similar emergency evacuation and MAYDAY practices and audio warnings</p>	<p>As this recommendation requires multiple jurisdictional coordination it is suggested that it may be presented as a topic of discussion amongst neighboring jurisdictions and HCDFRS at regional meetings such as The Metro Fire Chiefs, Council of Academy’s, and Operations Chief’s meetings.</p>	2	
<b>F. RIC and Rescue</b>			
<p><b>F.1.1</b> Train crews who may be operating near a MAYDAY to respond to the MAYDAY situation while continuing to address suppression activities.</p>	<p>See response to Report Recommendation D.5.1 also this recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.</p>	2	<p>Projected Revised Order Release Fall 2021</p>
<p><b>F.1.2</b> HCDFRS must develop a progressive training plan that develops and reinforces basic skills. This training plan must include:</p> <ul style="list-style-type: none"> <li>• RIC training at least biannually, focusing on low frequency, high stress situations for operations and communication staffing.</li> <li>• Instruction for personnel on actions to be taken from different positions within the structure. For example,</li> </ul>	<p>See response to Report Recommendation D.5.1</p>	2	



ISRB Recommendation	Response	Priority	Completion Date
personnel shall be instructed on proper search techniques when searching for a downed firefighter, rescue from the floor above, stabilizing conditions, and providing protection to the MAYDAY firefighter.			
<b>F.1.3</b> Officer training on managing a MAYDAY emergency. This training can take place simultaneously with the RIC training previously discussed.	See response to Report Recommendation D.5.1	2	
<b>F.2.1</b> Crews should receive training on TIC usage and TIC limitations, and they should regularly use the TIC on various types of incidents to gain familiarity with the devices.	The Bureau of Education and Training issued SO 2021.34 Thermal Image Camera Instructor Train-the Trainer. A Thermal Imager Camera Train-the-Trainer training program for the Howard County Department of Fire Rescue Services (Department) shall be conducted by SAFE-IR, Inc. instructional staff over five consecutive days. All classroom and live-fire sessions shall be conducted at the James N. Robey Public Safety Training Center (PSTC) or acquired structures. The Bureau of Education and Training (E&T) is seeking 15-20 personnel to become thermal image camera instructors at the rank of Firefighter, Master Firefighter, Lieutenant, and Captain to assist with delivery of thermal imager training and program development.	2	September 20 through September 24, 2021
<b>F.4.1</b> The Incident Commander should ensure that IRIC remains ready for deployment as a team of two. The IRIC shall be positioned at the initial point of entry for rapid deployment.	See response to Report Recommendation D.5.1	1	
<b>F.4.2</b> Train IRIC personnel to remain a team of two. Personnel must understand the difference between functioning as a back-up crew and IRIC.	See response to Report Recommendation D.5.1	1	
<b>F.5.1</b> Notwithstanding the lack of impact, HCDFRS must revise General Orders to instruct the Communications Center to advise the third arriving engine that they are the RIC.	This recommendation will be addressed in Revised General Order 410.01 Communications and 310.01 Structure Fires Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	

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<b>F.5.2</b> The highest-ranking responding officer, typically the responding Battalion Chief, should confirm with the third engine company that they are the RIC ENGINE. The RIC engine should acknowledge the assignment shortly after units transmit they are responding.	This recommendation will be addressed in Revised General Order 410.01 Communications and 310.01 Structure Fires Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	
<b>F.5.3</b> Shift directives that may alter assignments must be communicated to the Incident Commander.	This recommendation will be addressed in Revised General Order 300.07 Incident Command. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>F.6.1</b> HCDFS must add an additional engine company to all Box Alarms, including Local Box assignments, with the third due engine.	SO 2020.58 Local Box Alarm Change. To provider for effective firefighting resources on Local Box Alarm assignments, the Department of Fire and Rescue Services (Department) recently added the Field Safety Officer to this assignment. To further enhance the response, a third Engine Company will be added to the Local Box Alarm assignment. There is also a Special Service adjustment to this assignment as well. The addition of the third Engine Company allows for the establishment of a secondary water supply, as well as for use as a Rapid Intervention Company.	1	July 17, 2020
<b>F.7.1</b> The IC must articulate the companies that form a RIC at an incident, including single resources like Paramedic 56D at this incident.	This recommendation will be addressed in Revised General Order 300.07 Incident Command and 310.01 Structure Fires Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	
<b>F.8.1</b> An additional Safety Officer should be assigned to RIC operations with the responsibility of the safety of the RIC. The Safety Officer should monitor incident conditions and operational periods to assist with managing air supply. If necessary, the Safety Officer	As an Incident expands the IC has the ability to expand the IC chart as needed to include adding an additional Safety Officer, Division, and/or Group leaders.	1	

ISRB Recommendation	Response	Priority	Completion Date
should request additional resources to ensure the RIC operation may continue with minimal interruption.			
<b>G. Accountability</b>			
<b>G.1.1</b> Revise General Order 300.02 Personnel Accountability. Specifically, an accountability manager is critical to the safety of operating crews and there should be a standard process to quickly appoint one on all multi-unit responses.	This recommendation will be addressed in Revised General Order 300.02 Accountability. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.1.2</b> All members of HCDFRS should be provided accountability and crew integrity training so they understand the necessity for and implementation of accountability relating to incident management, PARs, and MAYDAY situations	See response to Report Recommendation D.5.1 also this recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	
<b>G.1.3</b> HCDFRS must revise the personnel accountability control boards to better meet the intent of NFPA 1561 4.5.2, particularly to identify units' geographical location and functional assignments.	HCDFRS personnel accountability control boards and IC tactical worksheets should reflect a tactical accountability identifying the three basic elements: who, what, and where.	1	
<b>G.1.4</b> HCDFRS should provide initial and continuous training to responders on General Order 300.02: Personnel Accountability and, in particular, identify the need for use of remote accountability boards at incidents that involve large structures or large incident scenes. This should include training for initial responders serving as an accountability manager for an incident commander or division and group supervisors.	This recommendation will be addressed in Revised General Order 300.02 Accountability. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.2.1</b> HCDFRS should initiate the use of common terminology when referencing occupancies in all communications, to maintain a shared mental model. In particular, all HCDFRS members should reference occupancies based on NIMS Incident Command System.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in	1	Projected Revised Order Release Fall 2021

ISRB Recommendation	Response	Priority	Completion Date
	period (THOAR Battalion Level) to ensure competency and evaluation		
<b>G.2.2</b> General Order 310.01 (41) should be revised to reflect this recommendation and crews should use “floor number ____” in all communications when referencing floors of a structure in conjunction with basement, attic and roof as specified in General Order 300.07: Incident Command System (Line 278).	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation. This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.2.3</b> HCDFRS crews should state Location in addition to Conditions, Actions and Needs (LCAN) when an assignment is completed or when requested by the Incident Commander. This change should be reflected in the applicable General Orders.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.2.4</b> In revising General Orders, HCDFRS should consider emphasizing reporting a PAR at the end of an LCAN report.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.3.2</b> Use of new or existing technologies could assist in identifying staffing levels. HCDFRS should explore technologies and procedures available to address volunteer and career staffing assignments.	HCDFRS is currently exploring new technology that would build an interface between CAD and TeleStaff. Alpine Project		

ISRB Recommendation	Response	Priority	Completion Date
<b>G.4.1</b> HCDFRS should consider establishing a procedure to account for an HVO and the HVO's PAT when a HVO operates separate of a crew as represented on the crew's collector ring.	This Recommendation will be addressed in Revised General Order 300.02 Accountability. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.4.2</b> Establishing a procedure for PATs and collector rings to account for a fire fighter who moves between crews at an incident will enhance accountability.	It shall be the responsibility of the firefighter, company officer, accountability manager, or IC to account for a firefighter who moves between crews at an incident.	1	
<b>G.5.1</b> HCDFRS should review associated General Orders and modify as needed to restrict an officer from self-dispatching units by phone or radio to an incident, separate of the Incident Commander.	This Recommendation will be addressed in revised General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>G.6.1</b> The HCDFRS and Communications Center must agree upon how unit staffing information will be relayed from units and summarized to the incident commander on multi-unit responses. The result should be consistent written policies and training for both HCDFRS and Communications Center staff.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>G.7.1</b> HCDFS should establish a command channel on incidents as needed	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>G.7.2</b> To align with NFPA Standard 1500.8.2.5.1, HCDFRS should adjust its interval notifications from fifteen (15) minutes to ten (10) minutes.	HCDFRS's PSAP has adjusted its interval notifications from fifteen (15) minutes to (10) minutes and this will be reflected in Revised GO 410.01 Communication. The Operations Policy Review Committee edits are in the final review stages after which	2	Projected Revised Order Release Fall 2021

ISRB Recommendation	Response	Priority	Completion Date
	the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.		
<b>G.7.3</b> The practice of time interval notifications from Communications Center to the Incident Commander is a critical task that should be continued. During a MAYDAY, the notifications should be restricted to a command channel. After the MAYDAY situation is resolved, interval notifications should resume on the operations channel.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>G.8.1</b> General Order 300.02 Personnel Accountability should be reviewed, updated, and republished.	Revised General Order 300.02 Accountability is currently being reviewed. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>G.8.2</b> All General Orders that reference or discuss Accountability procedures should be congruent to the revised General Order 300.02: Personnel Accountability.	This recommendation will be addressed in Revised General Order 300.07 Incident Command, General Order 310.01 Structure Fires and 300.02 Accountability. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>G.9.1</b> HCDFRS should investigate an electronic or radio-based PAR system.	HCDFRS will continue to explore various PAR methods and/or systems that may help improve the safety and accountability of its members.	3	
<b>G.10.1</b> HCDFRS should consider division and group supervisors having an accountability manager to assist with accountability when the situational demands exceed the ability of a group or division supervisor to make decisions and maintain accountability of units and personnel.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System, General Order 310.01 Structure Fire Operational Guidelines and General Order 300.02 Accountability. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021

ISRB Recommendation	Response	Priority	Completion Date
<b>H. Crew Integrity</b>			
<b>H.1.1</b> Fire Chief must ensure unit supervisors and crew members are trained on and implement best practices for maintaining crew integrity.	See response to Report Recommendation D.5.1 also this recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>H.2.1</b> Personnel must train together on a regular basis to allow all crew members to identify the crew's strengths, weaknesses, and enhance team cohesiveness. Training priorities should include topics that are low-frequency, high-risk, such as RIC deployments. The goal being that crew integrity will be maintained as various types of operations are conducted.	See response to Report Recommendation D.5.1 also this recommendation will be addressed in Revised General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>H.5.1</b> When the Command Aide assists crew members with tasks outside of their scope, the Command Aide must notify the Battalion Chief of the additional task.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>H.6.1</b> Ensure that ICs require any individual entering the IDLH to become part of a minimum 2- person crew.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>I. Effective Response Force</b>			
<b>I.1.1</b> HCDFRS must clearly define parameters of a Local Box Alarm versus a Full Box Alarm.	Anything that's a structure with visible fire, smoke or haze will get a Full Box Alarm. Local Box is an odor of something burning without visible smoke or fire. Since Woodscape the PSAP has better educated the dispatchers on the parameters of a Local Box	1	



ISRB Recommendation	Response	Priority	Completion Date
	Alarm versus a Full Box Alarm. Based on the perimeters on the initial 7005 Woodscape Drive call when the caller advised “Yes, we have a fire in our house” then said “we don’t see any flames, there was a lightning strike” the dispatcher dispatched Local Box 5-62. However, on the second 911 call when the caller advised “no I don’t see flames but our whole house is full of smoke” the Local Box should have been upgraded to a Full Box Alarm based on the parameters.		
<b>I.1.2</b> HCDFRS should codify expectations for units responding to Local Alarms, including a dedicated RIC company and an ability to establish a secondary water supply.	SO 2020.58 Local Box Alarm Change. To provide for effective firefighting resources on Local Box Alarm assignments, the Department of Fire and Rescue Services (Department) recently added the Field Safety Officer to this assignment. To further enhance the response, a third Engine Company will be added to the Local Box Alarm assignment. There is also a Special Service adjustment to this assignment as well. The addition of the third Engine Company allows for the establishment of a secondary water supply, as well as for use as a Rapid Intervention Company.	1	July 17, 2020
<b>I.1.3</b> Local Box and Full Box Alarm assignments should be standardized throughout the Baltimore Metropolitan Region	As this recommendation requires multiple jurisdictional coordination it is suggested that it may be presented as a topic of discussion amongst neighboring jurisdictions and HCDFRS at regional meetings such as; The Metro Fire Chiefs, Council of Academy’s, and Operations Chief’s meetings.		
<b>I.2.1</b> HCDFRS must train personnel to recognize how structure size, residential or commercial affects visual cues such as smoke characteristics.	See response recommendation D.5.1	2	
<b>J. Health and Safety</b>			
<b>J.1.1</b> General Order 120.02 Volunteer Officer Requirements should be amended to require all volunteer fire fighters obtain a yearly NFPA 1582 physical, including certification of their ability to safely operate an SCBA.	Recommendations addressed in General Order 150.17 Occupational Health Program: Occupational Medicine.	1	April 30, 2021

ISRB Recommendation	Response	Priority	Completion Date
<b>J.1.2</b> HCDFRS should fully enforce 29 CFR 1910.134, mandating that any and all members on the fireground must be properly fit tested and medically certified to use SCBA.	Recommendations addressed in General Order 150.17 Occupational Health Program: Occupational Medicine	1	April 30, 2021
<b>J.1.3</b> HCDFRS should develop a records management system that accurately accounts for all operational department members and their medical certification status and annual fit testing.	Recommendations addressed in General Order 150.17 Occupational Health Program: Occupational Medicine	1	April 30, 2021
<b>J.3.1</b> Develop a rehabilitation general order consistent with the intent of NFPA 1584.	Recommendations addressed in General Order 150.17 Occupational Health Program: Occupational Medicine	2	April 30, 2021
<b>J.3.2</b> Develop a mechanism to ensure that one of the volunteer operated canteen units is available to respond to an incident request in a timely and consistent matter.	Volunteer Corporations currently rotate the Canteen duties between stations for a two-week period. Upon request of the Incident Commander, the volunteer operated canteen is dispatched to respond to an incident. Currently there is no set time limit to respond but the Volunteer Corporations do a good job of getting the unit out in a timely manner.	2	
<b>J.4.1</b> Expand the response plan for the Field Safety Officer to include responding on all local box alarms to provide on scene safety oversight. Having on scene safety oversight is critical on incidents where an IDLH or active hot zone may be present.	SO 2020.58 Local Box Alarm Change Enhancing response standards to provide for effective firefighting resources on Local Box Alarm assignments, the Department of Fire and Rescue Services (Department) added the Field Safety Officer to this assignment. As identified in the ISRB, to further enhance the response, a third Engine Company was added to the Local Box Alarm assignment. There is also a Special Service adjustment to this assignment as well. The addition of the third Engine Company allows for the establishment of a secondary water supply, as well as for use as a Rapid Intervention Company.	2	July 17, 2020
<b>J.4.2</b> Deploy a second full time field Safety Officer.	A second full time Field Safety Officer is a future goal of HCFR and will be continuously evaluated as a possible new effort operational staffing initiative.	2	

ISRB Recommendation	Response	Priority	Completion Date
<b>J.4.3</b> Establish a department order outlining procedures for preserving and documenting evidence at the scene of an employee injury, accident, or near miss.		2	
<b>J.5.1</b> Re-establish a dedicated, on-call Safety Officer.	HCFR has modified its on-call program to include a dedicated on-call Safety Officer separating the dual duty previously held by the on-call Battalion Chief.	2	
<b>J.6.1</b> Amend HCDFRS General Orders to be consistent with NFPA 1500 8.2.5.1 to provide for 10-minute status updates from the Communication Center to the Incident Commander and provide the Communications Center with the associated training to implement the changed order.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	2	Projected Revised Order Release Fall 2021
<b>J.7.1</b> Amend HCDFRS orders (310.01 Single Family and Townhouse Structure Fire Operational Guidelines, 300.11 Rapid Intervention and IDLH Initial Entry Teams) to clearly define which response unit(s) shall be the IRIC and RIC units.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System, General Order 310.01 Structure Fire Operational Guidelines and General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>J.7.2</b> Amend applicable orders and response pattern to provide for an additional dedicated RIC engine on all Local Box and greater assignments.	SO 2020.58 Local Box Alarm Change Enhancing response standards to provide for effective firefighting resources on Local Box Alarm assignments, the Department of Fire and Rescue Services (Department) added the Field Safety Officer to this assignment. As identified in the ISRB, to further enhance the response, a third Engine Company was added to the Local Box Alarm assignment. There is also a Special Service adjustment to this assignment as well. The addition of the third Engine Company allows for the establishment of a secondary water supply, as well as for use as a Rapid Intervention Company.	1	July 17, 2020

ISRB Recommendation	Response	Priority	Completion Date
<b>J.7.3</b> Amend applicable General Orders to reflect that an IRIC and/or RIC shall be established at the point of entry into the IDLH environment prior to entry unless a known life hazard exists.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System, General Order 310.01 Structure Fire Operational Guidelines and General Order 300.04 MAYDAY. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>J.7.4</b> Amend General Order 410.01 Communications to require that prior to entry into an IDLH environment, the crew leader shall verbally report their entry location, intended actions upon entry, and staffing level to the Incident Commander. The Incident Commander should confirm and approve the actions prior to entry.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 410.01 Communications. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>J.8.1</b> Develop and implement a structured behavioral health program.	Currently a Lieutenant in BOSH administers and manages the department's behavioral health and wellness programs. This position ensures that member behavioral health, and wellness can be achieved at the highest levels possible while assuring adequate resources are available to each member. The BHPMO Officer shall have and maintain knowledge of occupational, fire service behavioral wellness initiative and current trends in fire service behavioral health hazards.	3	
<b>J.9.1</b> Implement a mandatory, nonpunitive, confidential fitness assessment program. This can be done independent of the annual physical, or incorporated into the annual physical, and done by the contracted Occupational Health provider.	Recommendations addressed in General Order 150.17 Occupational Health Program: Occupational Medicine	2	April 2021
<b>J.9.2</b> Develop a health education component to department training.	The essential duties and responsibilities of the Lieutenant in BOSH include assisting in the development, implementation and management of the official written risk management plan as specified in Chapter 4 of NFPA 1500, Standard on Fire Department Occupational Safety and Health program. The health aspects of the risk management plan shall be communicated to all members through training and education.		

ISRB Recommendation	Response	Priority	Completion Date
<b>J.9.3</b> Re-establish a functional Occupational Safety and Health Committee that is funded, respected, and utilized by senior administration.	The Occupational Safety and Health Committee is funded in the BOSH Bureau budget yearly and the Committee is to meet on a quarterly basis. Due to the COVID Pandemic BOSH resources were focused on the COVID response plan. BOSH's future plan is to re-establish this Committee which has the support of senior management.	2	
<b>J.9.4</b> Develop, by training and administrative support, a culture of safety that transcends the organization. The culture must be supported by Administration and include continuous training for Safety Officers. Staffing in BOSH needs to be increased to meet the growing demands of the new culture and expanding workforce.	Currently BOSH conducts Safety Officer workshops through E&T for qualified Safety Officers to promote a culture of safety. Also, BOSH is currently seeking applications to fill a new position for its standards and OSHA Compliance coordinator (Admin Analyst I). This position facilitates and supports key processes and accountabilities within BOSH, primarily in occupational safety and health compliance.	2	
<b>J.9.5</b> Conduct annual fire station safety inspection program consistent with NFPA and MOSH standards.	The new Compliance Coordinator position in BOSH will assure annual fire station safety inspection program are consistent with NFPA and MOSH standards.	2	
<b>J.10.1</b> PPE inspection, cleaning, and training program that effectively cleans PPE after exposure to contaminants and documents PPE maintenance across the garment lifespan.	General Order 150.18 Carcinogen Exposure Reduction Plan (CERP) outlines the cleaning of PPE procedures. In the event PPE is contaminated to the point where the cleaning procedures are insufficient, personnel shall place the items out of service and send them to the supply unit for Advanced Cleaning.	2	February 2018
<b>K. Treatment</b>			
<b>K.1.1</b> A standardized process for removal of turnout gear of a downed fire fighter in breathing apparatus, as well as a process to initiate and secure a chain of custody of the gear, must be developed. This process needs to be in the form of a policy with an associated department-wide training completed to ensure competency.	Currently in HCFR Trello Board under BOSH is a Departmental Safety Review order that addresses a Notable Safety Event Classification as a work-related event which causes harm, injury, illness, or property loss. When the impact crosses the threshold of seriousness, the Notable Safety Event shall further be declared a Special Safety Event by either the Incident Commander or the BOSH Bureau Chief. Once a Special Safety Event is established, preservation of evidence and the scene as appropriate shall occur.	2	

ISRB Recommendation	Response	Priority	Completion Date
<b>K.2.1</b> HCDFRS must revise General Order 310.01 and assign EMS-1 and/or EMS-2 functional duties for preparing EMS and rehabilitation early into an incident.	This report recommendation will be addressed in Revised GO 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>K.2.2</b> Should EMS-1 be used as command staff, HCDFRS must alert EMS-2 to fulfill the EMS supervisory functions.	In daily staffing the EMS officers are considered as part of the Command Staff. During a working fire it is the discretion of the IC as to the function of the EMS officer. IC's must assure that EMS supervisory functions are satisfied as needed.	1	
<b>K.2.3</b> HCDFRS must have an on-call EMS officer.	Currently HCFR does not have an on-call EMS officer as part of its On-Call Program. The Office of the Fire Chief will continue to monitor the need to add an EMS Officer to this program in the future.	1	
<b>K.3.1</b> HCDFRS must develop a policy that allows for and has a predetermined flow path for external QA.	HCFR hired the newly created Quality Assurance officer in the Emergency Services Bureau. The QA officer will work closely with the medical duty officers, Medical Director, ESB, and field clinicians to not only assure quality clinical care for our patients, but to also work towards providing more timely feedback and improving workflows. The goal with this dedicated position is to provide comprehensive "quality management" over the entire process, as recommended by the US Fire Administration.	2	December 2019
<b>K.4.1</b> Add an additional transport unit per alarm to ensure quick and effective treatment of civilian and fire service personnel.		1	
<b>L. Training</b>			
<b>L.1.1</b> HCDFRS policies and training for the ICS must emphasize a mission-oriented philosophy of command.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Orders will require a defined training phase in	1	Projected Revised Order Release Fall 2021

ISRB Recommendation	Response	Priority	Completion Date
	period (THOAR Battalion Level) to ensure competency and evaluation.		
<b>L.2.1</b> HCDFRS training must be conducted in realistic practical environments that contain the elements of stress and friction.	<p>The Department has implemented the recent and ongoing training listed below for hands on competency-based training in realistic conditions that contain the elements of stress and friction and reinforce fundamental skills and teamwork for fireground success.</p> <ul style="list-style-type: none"> <li>▪ SO 2018.20 Modern Fire Dynamics Training Integration</li> <li>▪ SO 2018.53 IAFF Fireground Survival Training</li> <li>▪ SO 2019.15 2019 American City Building High-Rise Training Live Burns</li> <li>▪ SO 2019.63 2019 Fall Quarterly Officer Training</li> <li>▪ SO 2019.85 Tactical High-Risk Operation Academy Rotations</li> <li>▪ SO 2020.13 Spring Quarterly Officer Training</li> <li>▪ SO 2021.21 Tactical High-Risk Operation Academy Rotations</li> </ul>	2	
<b>L.2.2</b> HCDFRS must develop a competency-based mentorship and training program to address effective rapid decision making and situational awareness on the fireground. Said program should include evaluative mechanisms for measuring an officer's core skills of proficiency for their position.	<p>The Tactical High-Risk Operations Academy Rotations (THOAR) training program two-month rotations will have a course number and a set of objectives for the scenarios. There will be a list of orders and skills to prepare for the scenarios. Education and Training will give each crew a report card. This will detail their performance based on the JPR's, orders, and objectives. The evaluations will not be punitive, however when a crew performs poorly they are rescheduled for a second run. If the second performance is sub optimal as well, then E&amp;T will work with the company and break down the scenario piece by piece and work with companies to teach, mentor and develop an optimal performance.</p>	2	January 2019
<b>L.4.1</b> HCDFRS must implement practical, realistic training on preventing and trapping errors on the fireground.	<p>The purpose of the Tactical High-Risk Operations Academy Rotations (THOAR) training program is to increase task cohesion, situational awareness, recognition-primed decision-making, communicating shared mental models under realistic fireground conditions to develop helpful schemata through training experiences. The training program is designed to develop and</p>	2	January 2019



ISRB Recommendation	Response	Priority	Completion Date
	reinforce a clear mission-oriented philosophy, effective fireground communication through closed-loop communications, comprehensive crew accountability, proficiency in officer ability to establish an incident action plan, and the global capacity of all Department personnel to carry out effective tactics. THOAR evolutions are a highly efficient and effective delivery method for quarterly officer training and annual firefighter certification courses.		
<b>L.5.1</b> HCDFRS's needs define the terminology conventions for geographic locations used on the fire scene. Training needs to include the terminology as well as practicing the proper functions in the communications order model.	This Recommendation will be addressed in Revised General Order 300.07 Incident Command System and General Order 310.01 Structure Fire Operational Guidelines. The Operations Policy Review Committee edits are in the final review stages after which the Revised General Order will require a defined training phase in period (THOAR Battalion Level) to ensure competency and evaluation.	1	Projected Revised Order Release Fall 2021
<b>L.6.1</b> Before any future equipment field deployment, HCDFRS must facilitate hands-on, competency-based training in realistic scenarios for all personnel on the equipment.	All new equipment will be implemented into the THOAR training program for hands-on, competency-based training prior to field deployment. Also new equipment is sometimes field tested on a trial bases by specific crews before full departmental field deployment.	2	
<b>L.6.2</b> HCDFRS needs to develop a training program that incorporates NFPA 1408, Standard for Training Fire Service Personnel in the Operation, Care, Use, and Maintenance of Thermal Imagers.	The Bureau of Education and Training issued SO 2021.34 Thermal Image Camera Instructor Train-the Trainer. A Thermal Imager Camera Train-the-Trainer training program for the Howard County Department of Fire Rescue Services (Department) shall be conducted by SAFE-IR, Inc. instructional staff over five consecutive days, All classroom and live-fire sessions shall be conducted at the James N. Robey Public Safety Training Center (PSTC) or acquired structures. The Bureau of Education and Training (E&T) is seeking 15-20 personnel to become thermal image camera instructors at the rank of Firefighter, Master Firefighter, Lieutenant, and Captain to assist with delivery of thermal imager training and program development.	2	September 20-24, 2021

ISRB Recommendation	Response	Priority	Completion Date
<p><b>L.7.1</b> All HCDFRS personnel, career, and corporate volunteer, of the same rank should have the same minimum training to assure consistency and team cohesion.</p>	<p>The Education and Training Bureau shall maintain an Operational Training Qualification Report that identifies career and corporate volunteers who are eligible to be Operational and meet the necessary qualification for the rank which they hold.</p>	<p>1</p>	
<p><b>M. Personal Protective Equipment</b></p>			
<p><b>M.1.1</b> The Howard County Department of Fire and Rescue Services should consider incorporating guidance from Special Order 2004-42 into a newly issued General Order that aligns with NFPA 1851. This order should mandate yearly advanced inspection and cleaning of all personal protective equipment, regardless of soiled condition, to assure that this equipment is in safe and serviceable condition.</p>	<p>The quartermaster monitors turnout gear that is sent in for cleaning and checks against the inspection records for compliance. With the rollout of extractors in the stations, to combat carcinogenic exposure, has caused a decrease in turnout gear making it to the QM for inspection. The Bureau of Logistics will work toward the adoption of a process and general order that will support this effort.</p>	<p>2</p>	
<p><b>M.2.1</b> General Order 530.02 should be revised to require all turnout coats to have the member's last name affixed to the rear tail of the coat. Should multiple members have the same last name, additional lettering would be used to further differentiate those individuals.</p>	<p>Current specifications for turnout gear ordered by the Quartermasters Office require a rear Velcro panel to affix a members last name to their turnout jacket. Each member is given one last name panel to place on their turnout jacket and must assure that said name panel transfer between both sets of turnout gear.</p>	<p>2</p>	
<p><b>M.2.2</b> Officers should assure all of their personnel have their name affixed to the rear tail of their turnout coats and request name panels for personnel, as necessary.</p>	<p>HCFR will add the name panel to its annual PPE checkoff sheet that is required with yearly evaluations. Also, Officers should check PPE name panels during all training exercises and request name panels as necessary.</p>	<p>2</p>	
<p><b>M.3.1</b> Order 530.02, Personal Protective Equipment, should be revised to align with NFPA Standard 1971. These revisions should include: An explicit prohibition of any modifications to equipment that would compromise or void its NFPA 1971 certification.</p>	<p>A revision of this order is currently in Trello and awaiting approval. This document includes the roll out of the personally owned protective equipment (POPE) and guidance for handling county issued PPE.</p>	<p>3</p>	
<p><b>M.5.1</b> Instruction and training for personal protective equipment should focus on proper donning of the entire safety ensemble, including the importance of utilizing and securing all components for</p>	<p>The company and member evaluation check off sheets for THOAR training includes ensuring personnel have fully and properly donned their PPE. All E&amp;T check off sheets for certification,</p>	<p>1</p>	

ISRB Recommendation	Response	Priority	Completion Date
maximum safety and protection (i.e. collars up, snaps fastened, etc.).	recertifications, and training competencies where PPE is required evaluate for members properly donning safety equipment.		
<b>M.5.2</b> Personnel should ensure that all clothing is fully and properly donned during any structural firefighting event for their safety.	The company and member evaluation check off sheets for THOAR training includes ensuring personnel have fully and properly donned their PPE to reinforce this as a normal safe practice for any structural firefighting event.	1	
<b>M.6.1</b> HCDFRS Quartermaster should continue their existing process of assuring gear is properly sized when re-issuing serviceable gear.	The Quartermaster's regular practice is to assure gear is properly sized when re-issuing serviceable gear. This process shall continue concerning re-issuing serviceable gear.	3	
<b>M.7.1</b> Create or update a General Order to institutionalize cultural practice of associating SCBA with riding positions.	The introduction of Bluetooth pairing for all breathing apparatus has forced this practice to take place. A notation in a future General Order can be included.	1	
<b>M.7.2</b> Educate personnel on the important current practice of keeping SCBA in the riding position for which it is identified. Whenever an SCBA is removed from apparatus for maintenance, a spare SCBA is to be placed in the vacant position.	This topic will be included in the 2021 SCBA Annual Training curriculum and reiterated in future training.	1	
<b>M.7.3</b> Make available a spare SCBA with the same functional capabilities (i.e. thermal imaging camera) as the SCBA removed from service.	The Department is in the process of adding iTICs to additional SCBA. Due to the life cycle of the SCBA and funding constraints, this goal may not be fully achieved until the next generation SCBA roll out.	1	
<b>M.7.4</b> Remind personnel to assure that their SCBA and portable radio identifiers match. (The only exception being when utilizing a spare SCBA due to SCBA being out for maintenance.).	The rollout of Bluetooth pairing has made assuring SCBA, and portable radio identifiers match a critical task during equipment check at the start of shift.	1	
<b>M.8.1</b> Develop a plan for the use of MSA A2 SCBA monitoring software, to include identifying who is responsible for monitoring the software on an incident and begin utilizing this software on incidents.		2	

ISRB Recommendation	Response	Priority	Completion Date
<b>M.9.1</b> Evaluate all department SCBA for low or dead internal clock batteries and replace affected power modules, utilizing warranty provisions whenever possible.	This process is incorporated into the SCBA maintenance program at the time of annual flow testing or as appropriate.	2	
<b>M.9.2</b> Evaluate BA Shop staffing options to provide for more efficient and timelier SCBA maintenance.	Logistics added an additional Breathing Apparatus Technician to the BA shop to provide for more efficient and timelier SCBA maintenance.	2	
<b>N. Apparatus and Equipment</b>			
<b>N.1.1</b> HCDFRS shall replace apparatus that exceeds the recommended lifespan from the Mercury Associates report.	The Department is working toward meeting this goal within the funding constraints of each fiscal year.	3	
<b>N.2.1</b> HCDFRS must revise its Vehicle Check Sheet to include the Hydraulic pump, hydraulic lines, and the 25-foot hydraulic line extensions to the Weekly Check Sheet, including lubrication and exercise of the couplings.	See N.7.1	1	
<b>N.3.1</b> A Ground Support representative and a mechanic from the County Maintenance Facility must be added to the on-call availability.	The Department has published a Logistics After Hours GO that provides guidance on how to resolve any logistics related issue and provides a point of contact. The Department has also entered contracts with third party vendors to resolve after hour maintenance issues.	3	
<b>N.3.2</b> All HCDFRS apparatus purchases should be designed in a fashion so that critical apparatus functions run independently from internal climate control.	The Departments apparatus work group will keep this in mind as units are specified.	3	
<b>N.4.1</b> All completed repairs and maintenance must be documented, with a copy of the documentation returned with the apparatus. Units must be placed out of service if there are persistent mechanical issues that may impact critical apparatus functions.	All completed repairs are documented in SAP once the work order is completed. At times, the work order is not closed out until sometime after the work is completed. Once completed an SAP Fleet Liaison user can access the information and provide it to the Company Captain. This practice has been utilized with mixed success for nearly two years.	1	

ISRB Recommendation	Response	Priority	Completion Date
<b>N.6.1</b> Each section of hose must be assigned an identification number in accordance with NFPA 1962 4.11.1.2 and logged into a database, so it can be easily tracked for hose testing and out of service documentation. A section of hose that is taken out of service should be followed up with a Help Desk submission and entered into the database with its reason for being taking out of service.	This process was started with the 2021 hose testing order. A database has been created in GoCanvas and the Bureau of Logistics will work to refine this process and database. Eventually, the goal is for the end user to be able to enter this information themselves. The proper reporting platform for damaged hose is the Equipment Help Desk.	2	May 2021
<b>N.7.1</b> Apparatus Daily and Weekly check off sheets must be custom to that piece of Apparatus	The Department is in the early stages of standing up a customized apparatus daily and weekly check off program. This includes leveraging the use of technology that the department already owns (Operative IQ).	1	
<b>N.7.2</b> Each check off sheet must be filled out to include the date, unit number, and FAICS number.	The stand-up of the new customized apparatus daily and weekly check off program will eliminate the human input side that causes this information to be missed.	1	
<b>N.7.3</b> A designee assigned by the station Captain must maintain the apparatus check sheets, repair receipts and maintenance logs.	General Order 110.01 Dailey Activities states, "Company responsibilities are assigned by the Station Captain and Company Officer and typically include: Vehicle/Equipment Maintenance and Testing.	1	
<b>N.7.4</b> HCDFRS should evaluate technology solutions to aid in maintenance, inspection, and inventory check sheets. Ideally, this electronic system will be compatible with smartphones and station computers.	See N.7.1	1	
<b>N.8.1</b> HCDFRS Nozzle and Appliance Inspection Checklist, found in Appendix B of Special Order 2018.30, should be amended to include service testing of Nozzle as recommended by NFPA 1962 5.3	Special Order 2021.44 amended to include service testing of Nozzle as recommended by NFPA 1962 5.3	2	June 2021
<b>N.9.1</b> Prior to placing thermal imagers in service, training shall be implemented. Including, but not limited to; operation, application use, and limitations as stated in NFPA 1408. All training shall be documented and placed in the training log.	The Bureau of Education and Training issued SO 2021.34 Thermal Image Camera Instructor Train-the Trainer. A Thermal Imager Camera Train-the-Trainer training program for the Howard County Department of Fire Rescue Services (Department) shall be	1	September 20 - 24 2021

ISRB Recommendation	Response	Priority	Completion Date
	<p>conducted by SAFE-IR, Inc. instructional staff over five consecutive days, all classroom and live-fire sessions shall be conducted at the James N. Robey Public Safety Training Center (PSTC) or acquired structures. The Bureau of Education and Training (E&amp;T) is seeking 15-20 personnel to become thermal image camera instructors at the rank of Firefighter, Master Firefighter, Lieutenant, and Captain to assist with delivery of thermal imager training and program development.</p>		